

A  
Project Report  
On  
**“ELECTRICITY GENERATION BY USING  
FOOTSTEPS”**



**Submitted to**  
**DEPARTMENT OF MECHANICAL ENGINEERING**  
**GURU GHASIDAS VISHWAVIDYALAYA**  
(A Central University)  
Bilaspur (C.G)  
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**Submitted By**

**VENNA ANJANEYA REDDY**  
**VEERMALLA CHARAN KUMAR**  
**N BHEEMARAO RAMJI**  
**M UMA MAHESWARA RAO**

**Submitted to**

**Dr. BIPLAB DAS**  
**(ASSISTANT PROFESSOR)**

Department Of Mechanical Engineering

School Of Studies Of Engineering & Technology

Guru Ghasidas Vishwavidyalaya, Bilaspur (Chhattisgarh)



CERTIFICATION BY THE EXAMINERS

This is to certify that project work entitled:

Project name

Submitted by:

Name	Roll No	Enrollment No
Mr. V. Charan Kumar	18104054	GGV/18/1333
Mr. V. Anjaneya Reddy	18104055	GGV/18/1334
Mr. N. Bheemarao Ramji	18104024	GGV/19/1176
Mr. M. Uma Maheswara Rao	18104022	GGV/18/1166

Has been examined by the undersigned as a part of examination of B. Tech (Mechanical) 8<sup>th</sup> semester project at Department of Mechanical Engineering, School of Studies of Engineering & Technology, Guru Ghasidas Vishwavidyala (Central Univesity) Bilaspur, (CG) India.

Biplab Das.

Internal Examiner

Date: 10/5/2023.

10/5/2023

External Examiner

Date:

Head of Department  
यांत्रिकी अभियांत्रिकी विभाग / Mechanical Engg. Dept  
प्रौद्योगिकी संस्थान / Institute of Technology  
गुरु घासीदास वि.वि. / Guru Ghasidas V.V.  
कोनी, बिलासपुर (छ.ग.) / Koni, Bilaspur (C.G.)  
Department of Mechanical Engineering  
School of Studies of Engineering & Technology,  
Guru Ghasidas Vishwavidyalaya, Bilaspur, Chhattisgarh



## ABSTRACT

In this project we are generating electrical energy by means of a non- conventional method just by walking on the footsteps. Non-conventional system for energies are very much required at this time. Energy generation using footsteps requires no any fuel input to generate electricity. In this project we are generating electricity just with the help of rack and pinion arrangement along with alternator and chain drive mechanism. For its proper functioning such that it converts Force into electrical energy, the mechanism consists of rack & pinion, chain drives, alternator and battery. We have discussed its various alternate applications with extension also. The power generation is much worthy but it has little initial cost. Man has needed and used energy at an increasing rate for the substance and well- being since time immemorial. Due to this a lot of energy resources have been exhausted and wasted. Proposal for the utilization of waste energy of foot power with human locomotion is very much relevant and important for highly populated countries like India where the railway stations, temples, etc, are overcrowded all round the clock.

Nowadays energy and power are the one of the basic need in this modern world. Energy demand is increasing day by day. On the other hand, the many energy resources are getting exhausted and wasted .Millions of people move around. This whole energy is wasted. If this energy made possible for utilization then it will be a great invention. In this project we are converting non-conventional from just walking foot step into electrical energy. This project uses simple drive mechanism such as rack and pinion assembly. The control mechanism carries the rack & pinion; D.C generator, gears, shafts, plates and multimeter to show output. We have discussed the various applications and further extension.

Non-conventional energy system is very essential at this time to our nation. Non- conventional energy using foot step needs no fuel input power to generate the electrical power. In this project the simple drive mechanism such as rack and pinion assembly mechanism is used for generating power by utilization of force which is obtained during the walking on steps is converted in to electric

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